

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Attorney Docket No.: **JP919990215US1**

In re Application of:

SHIGEFUMI ODAOHARA

Serial No.: **09/754,483**

Filed: **4 JANUARY 2001**

For: **POWER SUPPLY UNIT AND
COMPUTER**

§
§
§
§
§
§
§
§
§
§

Confirmation No.: **3573**

Examiner: **CHANG, E.**

Art Unit: **2116**

REPLY BRIEF

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted in response to the Examiner's Answer dated November 2,
2006.

REMARKS

On pages 3-4 and 6 of the Examiner's Answer, the Examiner cites col. 6, lines 44-46 and col. 3, lines 21-25 of *Ferry* in response to Appellants' point of *Ferry*'s selection being based on signals at a load and not based on the amount of current supplied to power supply circuits, as claimed.

Generally, *Ferry* is related to a voltage regulator that can operate properly regardless of the type of rechargeable battery being used (col. 3, lines 4-6). Specifically, *Ferry*'s voltage regulator includes a switched-mode power supply component, a linear regulation component, and a control means for selecting one of the two regulation components according to the voltage difference between a battery voltage and an output voltage (col. 3, lines 27-34). According to *Ferry*, the control means selects one of the regulation components according to the current consumed by the load (col. 3, lines 39-41). The linear regulation component is selected when the voltage difference is lower than a first predetermined threshold value (col. 3, lines 35-39). The switched-mode power supply component is selected when the current consumed by the load is higher than a second predetermined threshold value (col. 3, lines 43-45). The switched-mode power supply component is selected when the voltage difference is higher than the first threshold value and the current consumed by the load is higher than the second predetermined threshold value (col. 3, lines 47-50).

In contrast, Claim 6 recites "a detecting circuit for activating either said first power supply circuit or said second power supply circuit to convert said input voltage to said output voltage based on an amount of current supplied to said first and second power supply circuits." Thus, the claimed detecting circuit makes its selection based on the amount of current supplied to a first power supply circuit and a second power supply circuit, and not based on the current consumed by the load and other criteria disclosed by *Ferry* as mentioned previously. Hence, the claimed detecting circuit is different from *Ferry*'s control means. With or without *Schaffer*, the Examiner has not successfully demonstrated how *Ferry*'s selection criteria (such as voltage difference

between a battery voltage and an output voltage) is similar to the claimed selection criterion—the amount of current supplied to a first power supply circuit and a second power supply circuit.

On pages 3-4 and 6-7 of the Examiner's Answer, the Examiner combines the teachings of *Ferry* and *Schaffer* to render the claimed invention obvious under § 103.

However, according to § 2143 of the MPEP, three basic rules must be met in order to establish a *prima facie* case of obviousness for the purpose of rejection under § 103. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure.

Schaffer is related to the field of current sense amplifiers (col. 1, lines 7-8), which, on its face, is not related to the field of voltage regulators, and the Examiner has not provided any motivation to combine the two references to render the claimed invention obvious. Even if the references can be combined, as mentioned above, the selection criteria of *Ferry*'s control means are based on the consumption by the load, and the selection criterion of the claimed detecting circuit is based on the current supplied to a first power supply circuit and a second power supply circuit. Thus, the focus on the claimed invention is different from that of *Ferry*, and *Schaffer*'s teaching of converting voltage to current would not make any difference. For the reasons stated above, Appellants believe the § 103 rejection for Claims 6-10, 12 and 13 is improper and should be reversed.

No fee or extension of time is believed to be necessary; however, in the event an additional fee or extension of time is required, please charge that fee or extension of time requested to the Lenovo Deposit Account **50-3533**.

Respectfully submitted,



Antony P. Ng

Registration No. 43,427

DILLON & YUDELL, LLP

8911 N. Cap. of Texas Hwy, suite 2110

Austin, Texas 78759

(512) 343-6116

ATTORNEY FOR APPELLANTS